

BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH

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IN THE MATTER OF OBJECTIONS	:	
RECEIVED BY THE DIVISION OF	:	ORDER
OIL, GAS AND MINING	:	
PERTAINING TO THE PERMIT	:	DOCKET NO. 92-046
REVISION TO BARNEYS CANYON	:	CAUSE NO. M/035/009
MINE, M/035/009, SALT LAKE	:	
COUNTY, UTAH	:	

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On December 2, 1992, the above-entitled matter came before the Board of Oil, Gas and Mining. Representing the Board was William R. Richards, Esq., Assistant Attorney General, representing the Division of Oil, Gas and Mining (the "Division") was Thomas A. Mitchell, Esq., Assistant Attorney General, and representing the respondent Kennecott Corporation ("Kennecott") were David W. Tundermann, Esq., Jim Butler, Esq., and Elisabeth R. Blattner, Esq. of Parsons Behle & Latimer, and Shaun P.C. Steward, Esq. of the Kennecott Law Department. Petitioner Scott Endicott, a member of the Utah Chapter of the Sierra Club, and petitioner John P. Williams, an environmental researcher for the TAME TIC Committee, appeared individually on their own behalf.

The Board heard argument and evidence from Kennecott, argument from the petitioners, and a recommendation from the Division. Based upon the argument, evidence and recommendation presented at the hearing, the Board makes the following findings of fact, conclusions of law, and order. Voting in favor of the Order were Board members James W. Carter, Jay L. Christensen,

Dave D. Lauriski, E. Steele McIntyre, Raymond Murray, and Kent G. Stringham. Board member Judy F. Lever concurred and dissented in part.

FINDINGS OF FACT

1. The Barneys Canyon Mine is a gold mine owned and operated by Kennecott in southwestern Salt Lake County, on the east side of the Oquirrh Mountains.

2. The Barneys Canyon Mine has operated since 1989. Kennecott submitted a Notice of Intent to Commence Mining Operations to the Division in February 1988. The Division approved that NOI on August 31, 1988. The NOI was revised and consolidated to its final form in September 1989. As approved, the NOI included certain variances from the general reclamation regulations for pit highwalls and outcrops of the Melco and Barneys Canyon waste rock dumps.

3. Prior to construction of the Barneys Canyon Mine in 1988-89, the land was used principally for wildlife habitat.

4. Existing facilities at the mine include two open pits, the Barneys Canyon pit and the Melco pit, waste rock dumps associated with the pits, three heap leach pads, and ancillary facilities for ore transport, ore processing, and recovery of gold from the leach solution, as well as administrative and maintenance facilities.

5. Under the 1989 NOI, mining at Barneys Canyon is expected to continue until 1994.

6. In December 1991, Kennecott submitted a Notice of Intention to Revise Mining Operations to the Division (the "Permit Revision"). Kennecott proposed to expand the Melco pit, and construct two new pits, the South Barneys Canyon South ("SBCS") pit and the North Barneys Canyon South ("NBCS") pit located between the Barneys Canyon and Melco pits. Kennecott also proposed to construct related haul roads and waste rock dumps.

7. In connection with the Permit Revision, Kennecott requested certain variances from the general regulations for reclamation practices, including variances or partial variances from R647-4-111.7, Highwalls for the highwalls of the Melco and North Barneys Canyon South pits, and variances or partial variances from R647-4-111.13, Revegetation, for the pit highwalls and the outslopes of the Melco 7200 and 7300 waste rock dumps.

8. Under the Permit Revision, mining at Barneys Canyon is expected to continue until 1996.

9. On September 8, 1992, the Division granted tentative approval of the Permit Revision including approval of the variances and partial variances requested by Kennecott.

10. The petitioners timely filed comments on the Permit Revision and tentative approval. The Division determined that these petitioners submitted substantive comments concerning Kennecott's requests for variances from R647-4-111.7, Highwalls, and R647-4-111.13, Revegetation. Other comments that were

unrelated to the proposed NOI were referred to the Division of Air Quality and the Division of Water Quality.

11. Pursuant to Utah Code Ann. § 40-8-13(5)(d)(iii), and Utah Admin. R. 647-4-116.4, the Board issued a Notice of Agency Action scheduling a formal adjudicative hearing on the relevant substantive comments filed by the petitioners.

12. A prehearing conference was held before James W. Carter, Chairman of the Board, on November 9, 1992, and was attended by counsel for the Board and the Division, Kennecott and Scott Endicott. John Williams participated by telephone. Subsequently, a prehearing order was issued on November 13, 1992 which, inter alia, defined the scope of the hearing before the Board and specified procedures for submission of evidence and written argument.

13. Kennecott filed a written response to the Notice of Agency Action on November 16, 1992. Neither the Sierra Club, Scott Endicott, TAME TIC, nor John P. Williams filed responses to the Notice of Agency Action.

14. At the hearing, after hearing argument from the petitioners and evidence and argument from Kennecott, the Division recommended that the Board grant the requested variances.

The Melco Pit

15. With regard to the Melco pit, Kennecott seeks a variance from that portion of the highwall requirement, R. 647-4-111.7, which states, "In surface mining and in open cuts or pads

or roadways, highwalls shall be reclaimed and stabilized by backfilling against them or by cutting the wall back to achieve a slope angle of 45 degrees or less." Instead, Kennecott proposed to leave the Melco pit highwalls at an angle of 47°, the angle at which the pit highwalls have been and will be mined. Kennecott will also install safety berms on the edge of all pit benches to catch small rocks and retard erosion.

16. Expert analyses performed by Kennecott and on Kennecott's behalf indicate that, in the solid bedrock of the Melco pit walls, a highwall constructed at a 47° angle is expected to be stable.

17. Kennecott's experience in mining the Barneys Canyon and Melco pits since 1989 also indicates that the 47° highwall angle has been stable.

18. Cutting back the Melco pit wall to achieve a 45° slope angle would result in the removal of additional amounts of waste rock, and would disturb an additional 5.5 acres around the perimeter of the pit, and disposal of the additional waste rock would require expansion of the waste dumps by an additional 4.5 acres.

19. Neither a 45° slope nor a 47° highwall slope is likely to hold soil or sustain any significant vegetative growth. Cutting back the pit walls to achieve a 45° slope would result in no environmental benefit.

20. With regard to the Melco pit, Kennecott also seeks a variance from that portion of the general revegetation requirement, R. 647-4-111.13, which states, "Revegetation shall be considered accomplished when ... [t]he revegetation has achieved 70 percent of the premining vegetative ground cover...." Topsoil redistribution and revegetation are not possible on the solid rock bench faces of the Melco pit, at either a 45° or 47° overall slope angle.

21. As an alternative reclamation method, Kennecott proposed to topsoil and revegetate all benches more than forty feet wide that are safely accessible after mining. Kennecott will also topsoil and revegetate the pit bottom.

22. The difficulties in revegetating the solid rock bench faces, and the safety concerns associated with revegetating narrow pit wall benches justify a variance from the revegetation standard.

23. The alternative reclamation methods to the general highwall and revegetation requirements proposed by Kennecott for the Melco pit will provide a stable ecological condition consistent with probable future local land use, and will minimize hazards to public safety.

The Melco 7200 and 7300 Dumps

24. With regard to the Melco 7200 and 7300 dumps, Kennecott seeks a variance from the 70 percent revegetation standard set forth in R. 647-4-111.13.

25. It is unlikely that Kennecott will be able to achieve 70 percent of the premining vegetative ground cover on the dump slopes without regrading and redistribution of topsoil.

26. The terrain in which the Melco 7200 and 7300 dumps will be located is naturally very steep, ranging from 1.5h:1v to 1.75h:1v. Because of the steep terrain, regrading the dump outslopes to a 2h:1v would result in disturbing an additional twenty acres below the 7200 dump and twenty acres below the 7300 dump. In addition, regarding the dump outslopes would require double-handling of approximately five million tons of waste rock.

27. Due to the naturally steep terrain, topsoil cannot safely and economically be recovered from the dump sites, and the topsoil to be recovered from other disturbed areas at the Barney's Canyon Mine is not expected to yield sufficient topsoil to cover the Melco 7200 and 7300 dump slopes as well as the other areas to be topsoiled. Accordingly, topsoiling the Melco 7200 and 7300 dump slopes would require importing topsoil from elsewhere, causing secondary disturbance of otherwise undisturbed areas.

28. The Dry Fork waste dump from the Bingham Canyon copper mine is located at the base of the same canyon that contains the Melco 7200 dump and is permitted to expand up the canyon to overlap a portion of the Melco 7200 dump in the next 3-5 years. If the Melco 7200 dump is regraded to 2h:1v, a substantial part of the regraded 7200 dump may later be covered up by the Bingham dump, negating the regrading effort.

29. For these reasons, Kennecott proposed to leave the dump outslopes at their angle of repose (approximately 37°), without topsoil.

30. As an alternative reclamation method, Kennecott will cut benches into the dump slopes every 100 vertical feet, hydroseed the slopes, hand-plant tube stocks on the slopes, and study, establish and meet an achievable alternative revegetation standard approved by the Division. In addition, if the Bingham Dry Fork dump expands to overlap the Melco 7200 dump before reclamation begins, Kennecott has committed to regard that portion of the Melco 7200 dump that is not covered by the Bingham dump to a 2h:1v slope.

31. Expert analyses performed by independent consultants indicate that the 37° angle of repose dump slopes will be stable.

32. Kennecott's experience since 1989 with Barneys Canyon and Melco dumps also indicates that the 37° angle of repose is stable.

33. Kennecott's past experience with reclamation at the Barneys Canyon Mine demonstrates that effective wildlife habitat restoration can be achieved at a revegetation standard lower than 70 percent.

34. The additional acreage that would be disturbed if the dumps were regraded and covered with topsoil, the cost of double-handling substantial amounts of waste rock, and the safety concerns associated with regrading the dump slopes in naturally

steep terrain justify a variance from the general reclamation requirement.

35. The alternative reclamation method proposed by Kennecott for the Melco 7200 and 7300 dumps will return the land to a stable ecological condition with probable future local land use.

The NBCS and SBCS Pits

36. The NBCS pit design is substantially the same as the Melco pit design, expect that the NBCS pit will be smaller.

37. With regard to the highwalls of the NBCS pit, Kennecott seeks variances from the highwall an revegetation standards, R. 647-4-111.7, and 111.13, respectively.

38. These variances are justified for the same reasons as the corresponding variances for the Melco pit.

39. The alternative methods of reclamation proposed for the NBCS pit are the same as those proposed for the Melco pit, and will return the land to a stable ecologic condition consistent with probable future local land use.

40. The SBCS will also be smaller than the Melco pit, and will be partially backfilled with waste rock from the mining of the NBCS pit. The highwall slope angle of the SBCS pit will be less than 45°, and the backfilled portion of the pit will be reclaimed in accordance with general reclamation requirements.

41. With regard to the SBCS pit, Kennecott seeks a partial variance from the general revegetation standard, R. 647-4-111.13,

3. The Board concludes that Kennecott adequately has (1) identified the rules as to which it requests variances; (2) described the variances requested and the areas that would be affected by these variances; (3) presented justifications for these variances; and (4) described the alternative methods or measure of reclamation that it proposes to utilize, as required by R. 647-4-112.

4. The Board concludes that the alternative reclamation methods proposed by Kennecott to the general highwall requirement for the Melco and NBCS pits are consistent with the Mined Land Reclamation Act, Utah Code Ann. §§ 40-8-1 et seq.

5. The Board concludes that the alternative reclamation methods that Kennecott has proposed to the general revegetation standard with respect to the Melco, NBCS, and SBCS pits and the outslopes of the Melco 7200 and 7300 dumps are consistent with the Mined Land Reclamation Act, Utah Code Ann. §§ 40-8-1 et seq.

ORDER

1. The variances and partial variances from R. 647-4-111.7, Highwalls, sought by Kennecott with respect to the Melco, and North Barneys Canyon South pits are approved.

2. The variances and partial variances from R. 647-4-111.13, Revegetation, sought by Kennecott with respect to the Melco and the North and South Barneys Canyon South pits, and the Melco 7200 and 7300 dumps are approved.

for that portion of the pit that is not backfilled with waste rock from the NBCS pit.

42. The variance from the general revegetation requirement for those highwalls of the SBCS pit that remain after backfilling and reclamation is justified for the same reasons as the corresponding variance for the Melco pit.

43. The alternative methods of reclamation proposed for the non-backfilled portion of the SBCS pit are the same as those proposed for the Melco pit, and will result in a stable ecologic condition consistent with probable future local land uses.

CONCLUSIONS OF LAW

1. The Board has jurisdiction over the respondent and the petitioners pursuant to Utah Code Ann. § 40-8-5. This provision of the Mined Land Reclamation Act provides that the Board and the Division have jurisdiction and authority over all persons and property necessary to enforce the provisions of the Mined Land Reclamation Act.

2. Under R. 647-4-112 of the Rules for Large Mining Operations, an operator may request a variance by submitting to the Division information concerning (1) the rule as to which the variance is requested; (2) the variance sought and a description of the area affected; (3) justification for the variance; and (4) alternate methods or measure to be used to achieve reclamation. A variance "shall be granted if the alternative method or measures proposed will be consistent with the Act."

3. The Tentative Approval of Permit Revision issued by the Division on September 8, 1992 is affirmed and finally approved by the Board in all respects.

ISSUED AND SIGNED this 10th day of December, 1992.

STATE OF UTAH
BOARD OF OIL, GAS AND MINING



James W. Carter, Chairman